

A new *Pseudojana* species from Flores, Indonesia (Lepidoptera: Eupterotidae)

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Abstract: A new species of the genus *Pseudojana* HAMPSON, 1893 from the Indonesian island of Flores is described: *Pseudojana floresina* sp. n. (male holotype in Senckenberg-Museum Frankfurt am Main, Germany). The species, one of the easternmost representatives of the genus in the Indonesian archipelago, is rather bright in ground colour but with a well-developed dark pattern. Main diagnostic differences are found in the comparatively small male genitalia. Preimaginal instars and larval foodplants are unknown. The species appears to have more than one generation per year; it is known from 1270 to 1750 m altitude and, as usual for the genus, appears to be a nocturnal forest-dweller.

Eine neue *Pseudojana*-Art von Flores, Indonesien (Lepidoptera, Eupterotidae)

Zusammenfassung: Eine neue Art der Gattung *Pseudojana* HAMPSON, 1893 wird von der indonesischen Insel Flores beschrieben: *Pseudojana floresina* sp. n. (männlicher Holotypus im Senckenberg-Museum Frankfurt am Main). Die neue Art ist innerhalb Indonesiens einer der östlichsten bekannten Vertreter der Gattung; sie ist vergleichsweise hell in der Grundfarbe, aber mit sehr gut entwickelten dunklen Zeichnungselementen. Die Hauptunterschiede finden sich in den vergleichsweise kleinen männlichen Genitalarmaturen. Die Präimaginalstadien und Raupenfraßpflanzen sind unbekannt. Die neue Art scheint mehr als eine Generation pro Jahr zu haben; sie wurde bisher von etwa 1270 bis 1750 m Höhe gefunden und dürfte, wie üblich in der Gattung, ein nachtaktiver Waldbewohner sein.

Une nouvelle espèce de *Pseudojana* de Flores en Indonésie (Lepidoptera, Eupterotidae)

Résumé: Une nouvelle espèce du genre *Pseudojana* HAMPSON, 1893 est décrite de l'île indonésienne de Flores: *Pseudojana floresina* sp. n., holotype mâle déposé au Senckenberg-Museum, Frankfurt am Main en Allemagne. A ce jour, l'espèce est un des représentants les plus orientaux du genre en Indonésie. Elle possède une couleur de fond plutôt claire avec un patron noir particulièrement marqué. Les caractères diagnostiques principaux se retrouvent dans les armures génitales du mâle, relativement petites. Les stades préimaginaux et les plantes nourricières sont encore inconnus. L'espèce semble avoir plus d'une génération annuelle et elle est présente à des altitudes comprises entre 1270 et 1750 mètres. Comme les autres espèces du genre, elle semble être un habitant forestier nocturne.

Introduction

The bombycoid family Eupterotidae is generally not well-studied, especially in eastern Indonesia. The first member of the family known from the island of Flores, *Ganisa floresiana* NÄSSIG, 2009, was only recently described (NÄSSIG et al. 2009).

The taxonomy of the Eupterotidae remains largely unresolved. Recent studies have clarified the nomenclature of the family (NÄSSIG & OBERPRIELER 2007) and of the 53 currently recognised genera (NÄSSIG & OBERPRIELER 2008) and have begun to address the composition of natural groups (subfamilies) in the family (OBERPRIELER et al. 2003) and their relationships (ZWICK 2008). One such group is the “*Ganisa* group”, an informal collective group proposed by OBERPRIELER et al. (2003) and NÄSSIG & OBERPRIELER (2008) for a number of genera not readily attributable to the formal subfamilies of Eupterotidae, including Eupterotinae, in which most of these genera had been placed before (FORBES 1955, HOLLOWAY et al. 2001). Thus far no obvious synapomorphies are apparent for this assortment of genera, and it may even represent a paraphyletic grade from which some of the other eupterotid groups could have arisen (OBERPRIELER et al. 2003).

The genus *Pseudojana* HAMPSON, 1893 is a member of this *Ganisa* group. This genus was never properly revised and may contain about a dozen species (NÄSSIG & OBERPRIELER 2008: 63), some of which are still undescribed. One of the results of preparatory work for a revision of the genus is published here, describing a new species from Flores.

Abbreviations and conventions

Abbreviations of collections:

CRBP Collection Ron BRECHLIN, Pasewalk, Germany.

CTBC Collection Thierry BOUYER, Chênée, Belgium.

CWAN Collection Wolfgang A. NÄSSIG, now in SMFL.

SMFL Lepidoptera collection in the Senckenberg-Museum, Frankfurt am Main (with the number of the Lepidoptera type catalogue of the Senckenberg-Museum), Germany.

ZFMK Zoologisches Forschungsinstitut und Museum A. Koenig, Bonn, Germany.

Other abbreviations and conventions:

BC barcode.

fw. forewing(s).

GP no. dissection vial/genitalia slide no., ex CWAN, now in SMFL, if not stated otherwise.

HT holotype.

hw. hindwing(s).

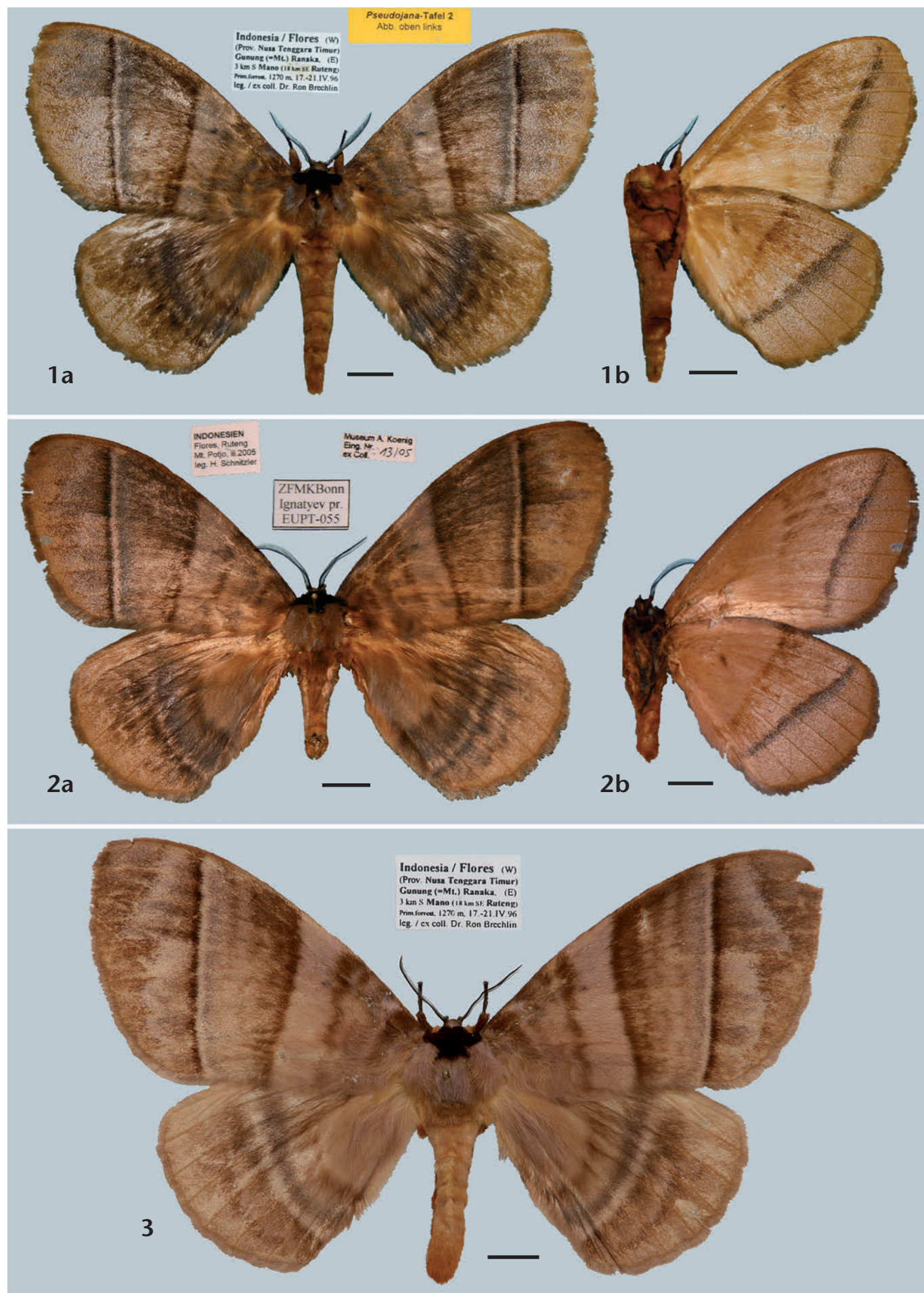
lfw. length of the forewing, measured in a straight line from the base of the wing to the most distant point of the apex, without the width of the thorax and without the tegulae.

PT paratype(s).

uns. underside.

ups. upperside.

¹ Studies in Eupterotidae no. 11 (no. 10: W. A. NÄSSIG, N. N. IGNATYEV & T. J. WITT (2009), Two new species of the genus *Ganisa* WALKER, 1855 from Sulawesi and Flores, Indonesia (Lepidoptera: Eupterotidae). — Entomofauna, Ansfelden, 30 (25): 453–464). — Corresponding author.



Figs. 1–3: *Pseudojana floresina* sp. n. **a** = ups., **b** = uns. **Fig. 1:** ♂ HT, SMFL. **Fig. 2:** ♂ PT, ZFMK. **Fig. 3:** ♀ PT, ups., CRBP. — Photographs approximately to the same scale; scale bars = 1 cm. — Photos: W. A. NÄSSIG (1, 2), R. BRECHLIN (3).

Pseudojana floresina sp. n.

(Figs. 1–4)

Holotype ♂: Indonesia, Flores (W), Prov. Nusa Tenggara Timur, Gunung Ranaka (E), 3 km S Mano, 18 km SE Ruteng, prim. forest, 1270 m, 17.–21. iv. [19]96, leg./ex coll. Dr. Ron BRECHLIN, in SMFL, SMFL type catalogue no. 4253; BC B3279-WN-A03. (Fig. 1; lfw. 60 mm.)

Paratypes (in total 7 ♂♂, 2 ♀♀): all Indonesia, Flores: 4 ♂♂, 2 ♀♀ (♀ Fig. 3), same data as HT, in CRBP (lfw. ♂♂: 59, 60, 60, 61 mm; ♀♀: 70, 72 mm). 1 ♂, 7 km S Ruteng, Golo Lusang, 1750 m, 17./18. x. 1985, leg. M. AMIN & F. GAUL, via U. PAUKSTADT v. 1998 in coll. CWAN/SMFL, GP 1283/00 NÄSSIG/SMFL; SMFL no. 4254 (lfw. 55 mm); BC B3279-WN-A04. 1 ♂, [same data?], via U. PAUKSTADT in coll. CTBC (lfw. 59 mm); GP 2086/09 NÄSSIG (genitalia Fig. 4); BC B3279-WN-A01, -A02. 1 ♂ (Fig. 2), Ruteng, Mt. Potjo, III. 2005, leg. H. SCHNITZLER, in ZFMK, Eing.-Nr. 13/05; GP N. IGNATYEV: Bonn EUP-055 (lfw. 61 mm).

Derivatio nominis: The new species is named after the Indonesian island of Flores, its only known distribution.

Description and diagnosis

♂ (Figs. 1, 2). Lfw. 59.38 mm (± 1.92 [1 s.d.]; $n = 8$). Size average for genus. Antenna 14.0–14.5 mm in length; shaft scaled to tip, consisting of ca. 75 segments; longest rami ca. 1.34–1.50 mm (difficult to measure because three-dimensionally bent), bipectinate. Ground colour greyish-brown with pinkish tint; rather bright in comparison with most congeners. Fw. with comparatively well-developed fasciae: a faint subbasal and basal line, followed by a small discoidal spot indicated by a patch of blackish scales; median area bright, less suffused with dark scales than other parts of wing; a well-developed postdiscal line, with postdiscal area appearing darkened by suffusion with dark scales; postmedian line strong, black, mesally bordered by bright, pale line of similar thickness and intensified dark scaling of postdiscal area; pattern and lines in antemarginal and marginal area only weakly developed, without two oblique fasciae as in many other species. Hw. with similar pattern of well-developed black lines and suffused areas (usually no discoidal patch visible), median area appearing nearly blackish. Abdomen and thorax bright greyish-brown except front part of prothorax and patagiae, which are dark as typical of genus. Legs darker than ground colour.

Underside: more unicolorous, pattern less strongly developed, in both fw. and hw. consisting only of small blackish discoidal patch, faint postdiscal and well-developed, broad black postmedian line. Abdomen ventrally often with orangy touch.

♂ **genitalia** (Fig. 4). Typical for genus (differences between species usually only small but apparently stable). Valves slightly smaller and shorter than in Sundaland species (see, e.g., HOLLOWAY 1987: fig. 131, *Pseudojana perspicuifascia* ROTHSCILD, 1917) except *P. obscura* HOLLOWAY, 1987 (see HOLLOWAY 1987: fig. 129) but lacking dorsal elongation of costa as in *P. obscura*. Distal prolongation of the valve apex short, stout, much shorter than in *P. perspicuifascia* and other Sundanian species.

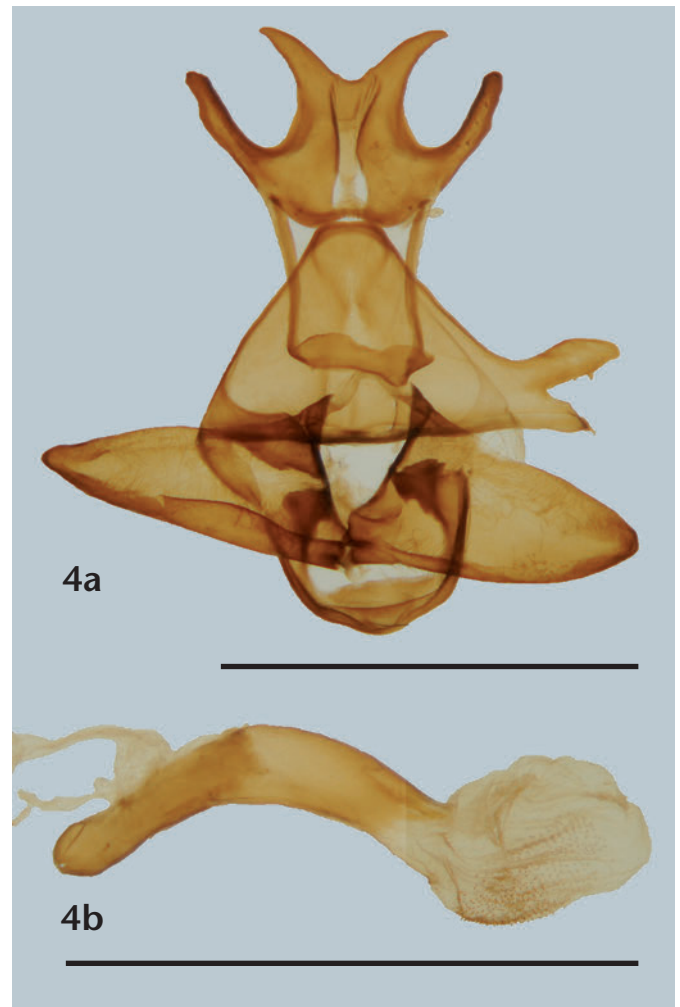


Fig. 4: *Pseudojana floresina* sp. n. **a:** ♂ genitalia, **b:** phallus separately (at different scale); GP no. 2086/09 NÄSSIG/SMFL; specimen in CTBC. — *Pseudojana* genitalia are symmetrical; the tegumen ring is damaged here, and the left and right valva are seen under slightly different angles. — Scale bars = 5 mm. — Photos: J.-P. KOPELKE.

Uncus with dorsal processes widely apart (not closely together as in *P. obscura*), with distinct middorsal gap (as in *P. perspicuifascia*). Gnathos very well developed (as usual in *Pseudojana*, in contrast to *Ganisa*, see comment in NÄSSIG et al. 2009: 458), largely free from lateral base of uncus to middle, where phallus is guided by central notch of elongated gnathos plate. Phallus comparatively small; vesica large, bulbous, with ventral field of small scobination.

♀ (Fig. 3). Lfw. 70/72 mm. Sexual dimorphism only weakly developed: colour, pattern and wing shape similar as in ♂, only clearly larger. Antenna bipectinate, with shorter rami than in ♂.

♀ **genitalia**. Not dissected.

Preimaginal stadia. Unknown, as for most species of the genus (larva of a Chinese species illustrated and described by MELL 1930: 450–451, pl. IX, figs. 5–11, as feeding on small woody Rubiaceae, Cinchonoidea: *Lasianthus* sp. and *Adina globiflora* and *A. rubella*).

Phenology and ecology. Specimens have been taken in March (1 ♂), April (7 specimens) and October (1 ♂),

indicating the occurrence of more than one generation per year. The recorded elevations range from 1270 m (most specimens) to 1750 m, corresponding mainly to the higher regions of the lower montane zones.

The species probably flies at night as its congeners do. Its natural larval foodplants are unknown.

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